REVISIONS			
LTR	DESCRIPTION	DATE	APPROVED
A	Added dash numbers R12, Y12, and G12. Added CAGE 07479. Reworked figure 1 and table II. Editorial changes throughout.	20 July 1995	K. Cottongim

THE ORIGINAL FIRST PAGE OF THIS DRAWING HAS BEEN REPLACED.

Prepared in accordance with DOD-STD-100

REV																					
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REV STATUS OF PAGES	REV		A	A	A	A	A	A	A	A	A	A	A	A	A	A	A				
	PAGES		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15				

Original date of drawing: 27 JANUARY 1986	PREPARED BY Paul A. Schmitt	DEFENSE ELECTRONICS SUPPLY CENTER DAYTON, OHIO
	CHECKED BY John S. Belt	TITLE INDICATOR ASSEMBLIES: RED, YELLOW, GREEN; PLAIN AND FILTERED LENSES; PANEL SEALED AND PANEL AND REAR SEALED
	APPROVED BY John H. Buchanan	
	SIZE A / CODE IDENT. NO. 14933	DWG NO. 85122
	REV A	PAGE 1 OF 15

DESC FORM 144
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AMSC N/A

5980-E005

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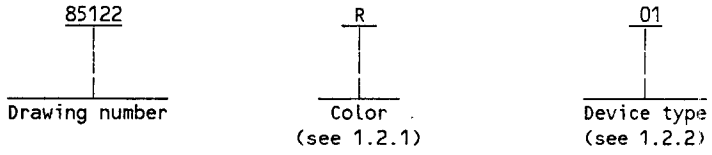
1. SCOPE

1.1 Scope. This drawing describes the requirements for panel sealed and panel and rear sealed indicator assemblies with plain or filtered type lens designed for sunlight viewing, available with antireflection coated lens and electrostatic screen.

1.2 Part or Identifying Number (PIN). The complete PIN shall be as shown in the following example:



1.2.1 Color designators. The color designators shall be a single digit character as follows:

Color designator	Color (peak wavelength)	
G	Green	(571 nm)
R	Red	(626 nm)
Y	Yellow	(585 nm)

1.2.2 Device types. The device types shall be as follows:

Device type	Description
G01, R01, Y01	Short body with plano convex plain glass lens.
G02, R02, Y02	Long body with plano convex plain lens; rear terminations sealed.
G03, R03, Y03	Short body; flat glass filter lens with focussed beam for sunlight viewing; 30° solid angle.
G04, R04, Y04	Short body; flat glass filter lens with pin point source for wide angle sunlight viewing; 100° solid angle.
G05, R05, Y05	Long body; flat glass filter lens with focussed beam for sunlight viewing; 30° solid angle; rear terminations sealed.
G06, R06, Y06	Long body; flat glass filter lens with pin point source for wide angle sunlight viewing; 100° solid angle; rear terminations sealed.
G07, R07, Y07	Long body; flat glass filter lens with focussed beam for sunlight viewing antireflection coating; 30° solid angle; rear terminations sealed.
G08, R08, Y08	Long body; flat glass filter lens with pin point source for wide angle sunlight viewing, antireflection coating; 100° solid angle; rear terminations sealed.
G09, R09, Y09	Long body; flat glass filter lens with focussed beam for sunlight viewing, antireflection coating and electrostatic screen; 30° solid angle; rear terminations sealed.
G10, R10, Y10	Long body; flat glass lens with pin point source for wide angle sunlight viewing, antireflection coating and electrostatic screen; 100°solid angle; rear terminations sealed.
G11, R11, Y11	Long body, plano convex plain lens with electrostatic screen; rear terminations sealed.
G12, R12, Y12	Short body, flat glass filter lens with focussed beam for sunlight viewing 30° solid angle.

1.3 Package materials, configurations, and dimensions. The package configurations and dimensions are shown on figure 1. Dimensions are in millimeters; English (inch) equivalents are in parenthesis. The package materials shall consist of the following:

a. Shroud and contrast ring: Aluminum alloy, black anodized.

b. Body and nut: Aluminum alloy.

c. Washer: Beryllium-copper alloy, tin plated.

d. Lens: Glass.

e. Sealing ring: Polytetrafluoroethylene (PTFE).

f. Terminations: Copper alloy, silver plate or tin-lead.

1.4 Absolute maximum ratings.

	Red	Yellow	Green
Peak forward current	90 mA dc	60 mA dc	90 mA dc
Maximum forward current	30 mA dc	20 mA dc	30 mA dc
Maximum reverse voltage	5 V	5 V	5 V
Peak wavelength	635 nm	583 nm	565 nm
Dominant wavelength	626 nm	585 nm	571 nm
Maximum power dissipation	135 mW 1/	85 mW 2/	135 mW 1/
Operating and storage temperature		-55°C to +100°C	
Insulation resistance 3/		1,000 MΩ	

2. APPLICABLE DOCUMENTS

2.1 Government documents.

2.1.1 Specifications and standards. The following specifications and standards form a part of this drawing to the extent specified herein. Unless otherwise specified, the issues of these documents shall be those listed in the issue of the Department of Defense Index of Specifications and Standards (DODISS) and supplement thereto, cited in the solicitation (see 6.2).

SPECIFICATIONS

MILITARY

MIL-L-3661 - Lampholder, Indicator Lights, Indicator Light Housings and Indicator Light Lenses, General Specification for.

MIL-C-5541 - Chemical Conversion Coatings on Aluminum and Aluminum Alloys.

MIL-P-11268 - Parts, Materials, and Processes Used in Electronic Equipment.

MIL-O-13830 - Optical Components for Fire Control Instruments, General Specification Governing the Manufacture, Assembly, and Inspection of.

MIL-C-14806 - Coating, Reflection Reducing for Instrument Cover Glasses and Lighting Wedges.

MIL-S-19500 - Semiconductor Devices, General Specification for.

1/ Derate at 1.8 mW/°C above +25°C ambient temperature.
2/ Derate at 1.6 mW/°C above +50°C ambient temperature.
3/ Between both terminations and indicator body.

STANDARDS

MILITARY

MIL-STD-454 - Standard General Requirements for Electronic Equipment.

MIL-STD-750 - Test Methods for Semiconductor Devices.

(Unless otherwise indicated, copies of specifications, standards, and handbooks are available from Defense Printing Service Detachment Office, Building 4D (Customer Service), 700 Robbins Avenue Philadelphia, PA 19111-5094.)

2.2 Non-Government publications. The following document(s) forms a part of this document to the extent specified herein. Unless otherwise specified, the issues of the documents which are DoD adopted are those listed in the issue of the DODISS cited in the solicitation. Unless otherwise specified, the issues of documents not listed in the DODISS are issues of the documents cited in the solicitation (see 6.2).

AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)

ANSI/IES RP-16-1980 - Nomenclature and Definitions for Illuminating Engineering.

(Application for copies should be addressed to the American National Standards Institute, Inc., 1430 Broadway, New York, NY 10018.)

(Non-Government standards and other publications are normally available from the organizations that prepare or distribute the documents. These documents also may be available in or through libraries or other informational services.)

2.3 Order of precedence. In the event of a conflict between the text of this drawing and the references cited herein, the text of this drawing shall take precedence. Nothing in this drawing, however, shall supersede applicable laws and regulations unless a specific exemption has been obtained.

3. REQUIREMENTS

3.1 Item requirements. The individual item requirements shall be as specified herein.

3.2 Abbreviations, symbols, and definitions. Abbreviations, symbols, and definitions used herein shall be as specified in MIL-S-19500.

3.3 Design.

3.3.1 Configurations and construction. The design configurations shall conform to 1.3, figure 1 and the other attributes specified herein. Each indicator assembly shall consist of a metal body (housing), an integral light emitting diode with glass lens that is sealed to the body with a metal lens cap and a sealing capability between the body and mounting panel with solid termination leads.

3.3.2 Parts, processes, materials, and finishes. The parts, materials, processes, and finishes shall conform to MIL-P-11268, requirement 5 of MIL-STD-454, MIL-L-3661, and MIL-C-5541, class 3.

3.3.2.1 Shroud and contrast ring. The shroud and contrast ring shall be black anodized (matt) aluminum alloy.

3.3.2.2 Body and nut. The body and nut shall be aluminum alloy, conversion coating finish to MIL-C-5541, class C.

3.3.2.3 Lead terminations. The lead terminations shall be copper alloy, silver plated, or tin-lead, and shall be solderable in accordance with MIL-STD-750, method 2026.

3.3.2.4 Washer. The washer shall be copper alloy with tin or nickel plate.

3.3.2.5 Sealing ring. The sealing ring shall be polytetrafluoroethylene (PTFE).

3.3.3 Lens and filter. The plain lens and the external component of the filter lens shall be glass.

3.3.3.1 Plain lens. The plain lens shall be plano convex with the convex face towards the observer and the plain face, which shall have a diffusing finish, towards the LED.

3.3.3.2 Filter lens. The filter lens shall be a neutral color transmission filter without converging or diverging power. All components of the filter lens shall be optically bonded.

3.3.3.2.1 Filter transmission. The filter shall have a luminous transmission 12 percent maximum in the spectral region 400 through 700 nanometers as measured with an eye corrected photometer or otherwise.

3.3.3.2.2 Filter uniformity. The transmission uniformity as measured over the entire surface of the filter, with an eye corrected photometer or otherwise, to the spectral region of 400 to 700 nanometers shall be ±15 percent of the average luminous transmission.

3.3.3.2.3 Antireflection coating. The coating on the operator side of the filter shall be an antireflection coating in accordance with MIL-C-14806 with the exception that the spectral reflectance shall be as follows:

Wavelength range (nanometers)	Reflectance (percent maximum) for angle of incidence shown	
	0°	30°
440 to 685	0.6 absolute 0.4 average	1.0 absolute 0.5 average

3.3.3.2.4 Filter-surface quality. The filter shall meet or exceed the scratch-dig quality requirements of MIL-O-13830, level 60-40.

3.3.3.3 Electrostatic protection. A transparent conductive film coating or conductive mesh shall be provided between the lens and LED. This coating or mesh shall act as an EMI shield, providing a maximum resistance of 7 ohms/square.

3.3.4 LED source. The LED shall be an integral part of the indicator assembly and is not replaceable.

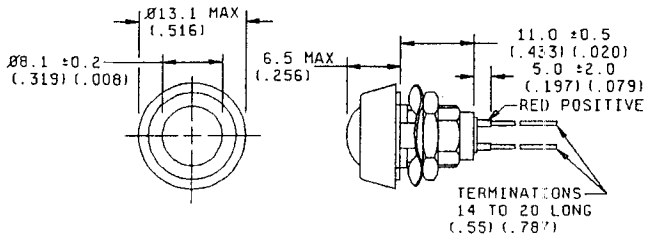
3.4 Marking. The following marking shall be placed on each indicator device and shall be legible at time of shipment:

a. Type designation (see 1.2.2).

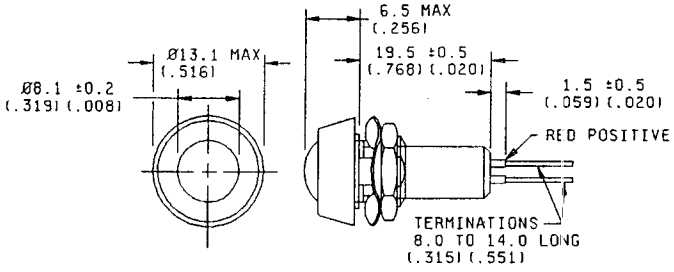
b. Lot identification code (see MIL-S-19500).

c. Manufacturer's name, trademark, or identification (see MIL-S-19500).

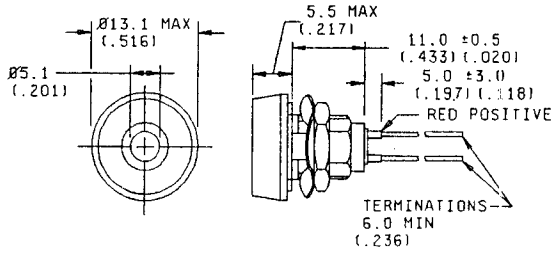
3.5 Manufacturer eligibility. A certificate of compliance shall be required from a manufacturer in order to be listed as an approved source of supply (see 6.4 and 6.5).



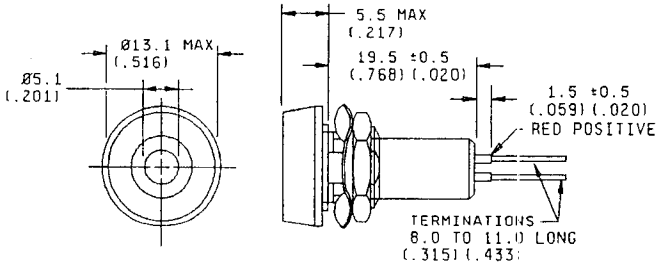
DASH NUMBERS R01, Y01, AND G01.



DASH NUMBERS R02, Y02, AND G02.



DASH NUMBERS R03, Y03, G03, R04, Y04 AND G04.



DASH NUMBERS R05, Y05, G05, R06, Y06, G06,
R07, Y07, G07, R08, Y08, AND G08.

FIGURE 1. Dimensions and configurations.

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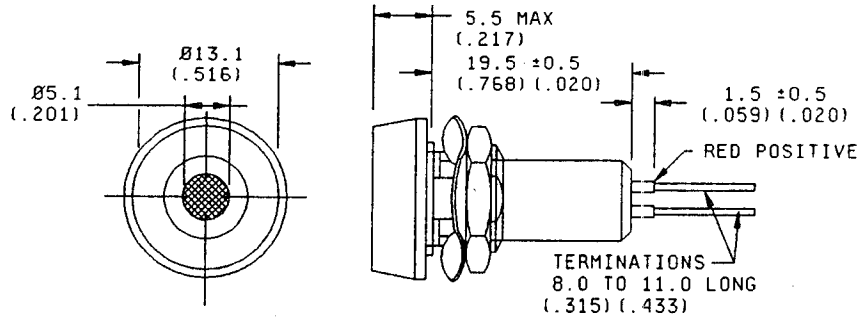
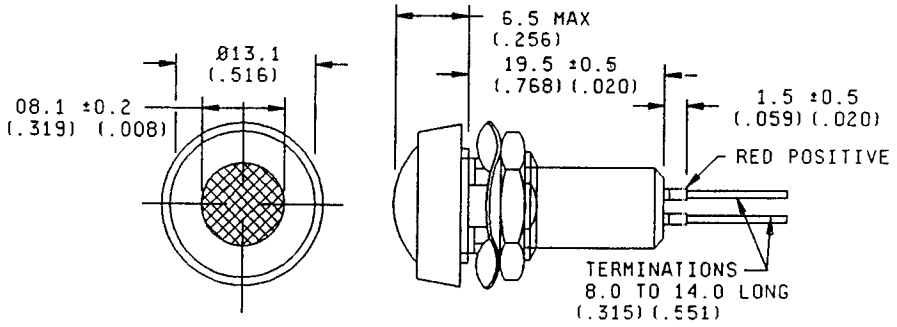
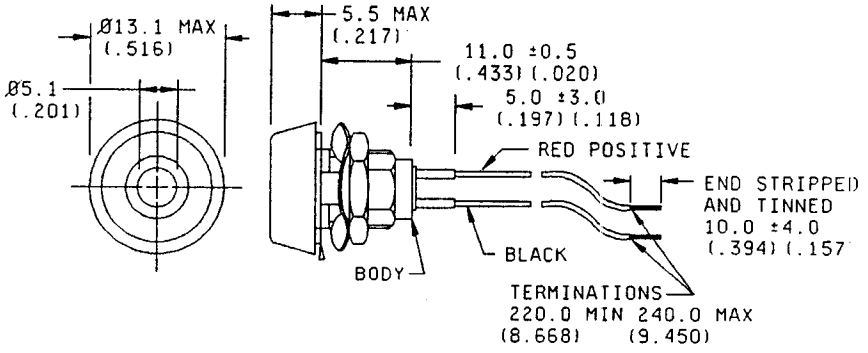


DASH NUMBERS R09, Y09, G09, R10, Y10 AND, G10.



DASH NUMBERS R11, Y11, AND G11.



DASH NUMBERS R12, Y12, AND G12.

FIGURE 1. Dimensions and configurations - Continued.

3.6 Mounting information. Figure 2 shows the recommended mounting hole and details.

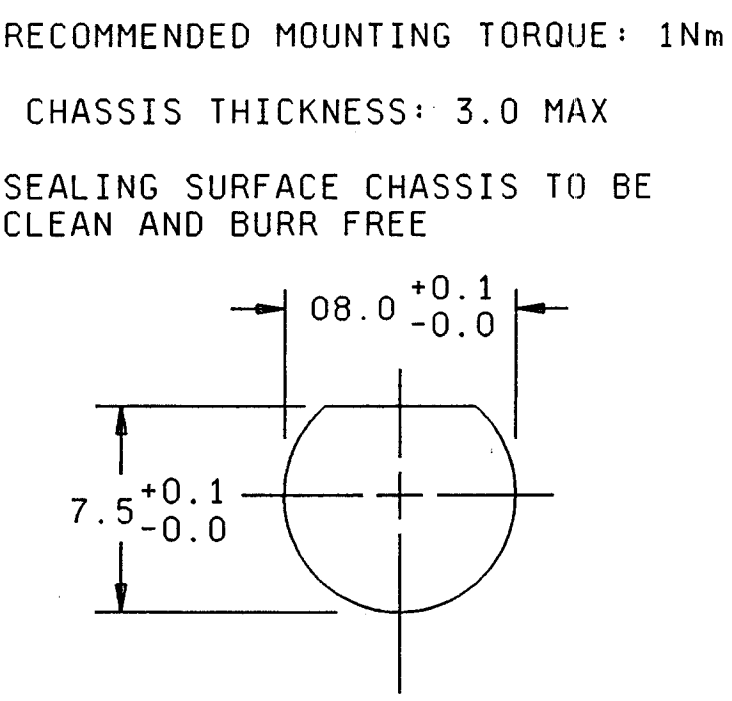


FIGURE 2. Mounting hole details.

4. QUALITY ASSURANCE PROVISIONS

4.1 Sampling and inspection. Sampling and inspection shall be in accordance with MIL-S-19500.

4.2 Screening. All devices shall be screened in accordance with table I herein. Devices that exceed the limits of table II herein shall be rejected.

4.2.1 Burn-in conditions. Power burn-in conditions shall consist of I_F = 20 mA dc for yellow and 30 mA dc for red and green (constant current shall be maintained), at T_A = +25°C ±5°C for 168 hours minimum.

4.3 Quality conformance inspection.

4.3.1 Group A inspection. Group A inspection shall consist of the inspections and tests specified in table III herein.

4.3.2 Group B inspection. Group B inspection shall be conducted in accordance with the conditions specified for subgroup testing in MIL-S-19500 and table IV herein. Electrical measurements shall be in accordance with table II herein.

TABLE I. Screening tests.

Test	MIL-STD-750 method	Conditions and measurements
High temperature storage (nonoperating)	1032	T_A = +100°C, time = 72 hours minimum
Thermal shock (temperature cycling)	1051	Test condition A, except $T_{(high)}$ = +100°C 10 cycles; time extremes at temperature = 15 minutes minimum
Constant acceleration	2006	Nonoperating 20,000 g; Y_1 only
Seal	1011	Test condition A
Pre burn-in measurements	4011 4016	I_V, in accordance with table II V_F I_R
Burn-in (forward bias)		I_F = 20 mA dc, Y; 30 mA dc, R and G; T_A = +25°C ±5°C, 168 hours minimum
Post burn-in measurements	4011 4016	I_V, in accordance with table II (within 72 hours of burn-in) V_F I_R ΔI_V = 20 percent maximum from initial value ΔV_F = ±50 mV from initial value

TABLE II. Electrical and spectral measurements.

Test	Dash number	MIL-STD-750		Symbol	Limits		Unit
		Method	Condition		Min	Max	
Luminous intensity (see 4.4.2 measured on-axis)	G01,G02,G11		I_F = 20 mA	I_V	12		mcd
	R01,R02,R11		I_F = 10 mA	I_V	15		mcd
	Y01,Y02,Y11		I_F = 10 mA	I_V	12		mcd
	G03,G05,G07,G09,G12		I_F = 20 mA	I_V	10		mcd
	R03,R05,R07,R09,R12		I_F = 20 mA	I_V	10		mcd
	Y03,Y05,Y07,Y09,Y12		I_F = 15 mA	I_V	5		mcd
	G04,G06,G08,G10		I_F = 20 mA	I_V	1.0		mcd
	R04,R06,R08,R10		I_F = 15 mA	I_V	1.0		mcd
	Y04,Y06,Y08,Y10		I_F = 15 mA	I_V	0.5		mcd
Forward voltage	All	4011	I_F = 20 mA	V_F	1.6	3.0	V
Reverse current	All	4016	V_R = 5 V dc	I_R		100	μA
Insulation resistance	All	1016	Condition 3 between both terminations (leads) and body	R_{ISO}	1,000		MΩ

TABLE III. Group A inspection.

Inspection	MIL-STD-750		Sampling plan	Symbol	Limits		Unit
	Method	Conditions			Min	Max	
Subgroup 1			5				
Visual and mechanical inspection	2071						
Subgroup 2			7				
Luminous intensity		Table II		I_V	Observe light output		
(Device types in accordance with table II)							
Forward voltage	4011	I_F = 20 mA dc		V_F	1.6	3.0	V dc
Reverse current	4016	V_R = 5 V dc		I_R		100	µA dc
Subgroup 3			10				
High temperature		T_A = +100°C					
Luminous intensity		Table II			Observe light output		
(Device types in accordance with table II)							
Reverse current	4016	V_R = 5 V dc		I_R		100	µA dc
Low temperature		T_A = -55°C					
Luminous intensity		Table II			Observe light output		
Forward voltage	4011	I_F = 20 mA dc		V_F	1.6	3.0	V dc
Subgroup 4			7				
Insulation resistance	1016			R_{ISO}	1,000		MΩ
Subgroups 5, 6, and 7		Not applicable					

TABLE IV. Group B inspection.

Inspection	MIL-STD-750		Sampling plan
	Method	Conditions	
Subgroup 1			5/0
Solderability	2026		
Resistance to solvents	1022		
Subgroup 2			5/0
Thermal shock	1051	Test condition A, $T_{(high)}$ = +100°C	
Immersion (seal)	1011	Test condition A	
Electrical measurements		Table II	
Subgroup 3			5/0
Life test	1027		
Electrical measurements		Table II	
Subgroups 4 and 5		Not applicable	
Subgroup 6			5/0
High temperature life (nonoperating)	1032		
Electrical measurements		Table II	
Subgroup 7			5/0
Terminal strength	2036	Test condition A, 2 pounds for 10 seconds	
Vibration	2056		
Shock	2016		
Electrical measurements		Table II	

4.4 Methods of inspection. Methods of inspection shall be as specified herein.

4.4.1 Visual and mechanical inspection. Indicator assemblies shall be examined under a magnification between 3X and 10X. Indicators that exhibit any of the following defects shall be rejected.

a. Termination identification, markings (content, placement, and legibility), materials, construction, and workmanship not in accordance with the requirements specified herein.

b. Defects or damage resulting from manufacturing, handling, or testing.

c. Visible evidence of corrosion, contamination, or breakage, grossly bent or broken terminations, cracked seals, and peeled, flaked, or blistered plating. (Unless there is evidence of flaking, pitting, or corrosion; discoloration of the finish shall not be cause for failure.)

d. Terminations that are not intact and aligned in their normal location, free of sharp or unspecified termination bends.

e. Terminations and lens that are not free of foreign material such as paint, or other adherent deposits, or dust.

4.4.2 Axial luminous intensity. This measurement is made with a photometer described, calibrated, and operated as specified herein.

4.4.2.1 Description of photometer.

4.4.2.1.1 Type of response. The photometer shall be of a type that is designed to respond to illuminance (or luminous incidence); that is, incident luminous flux density or lumens per unit area. Units for luminous incidence are lux (lm/m^2). The output of the photometer shall be linearly related to luminous incidence over the range of levels encountered in calibration and measurement. The output may be a voltage or a current, or may be rendered directly in the units of luminous incidence.

4.4.2.1.2 Spectral response. The relative response of the photometer shall be within 6 percent of $v(\lambda)$ at all wavelengths within the effective spectrum of devices to be measured, where $v(\lambda)$ is the photopic spectral luminous efficiency value as given in ANSI/IES RP-16-1980. The effective spectrum for a given type of device extends from the minimum to the maximum wavelength (λ v) values.

4.4.2.1.3 Reacceptance pattern. The off-axis reacceptance of the photometer shall be constant over a large enough angle that it responds equally to light from all parts of the device to be measured. An effective plane of reacceptance (image of the detecting surface) shall be defined with respect to which the calibration can be performed.

4.4.2.2 Calibration of photometer. Radiation from a certified (NBS traceable) standard of spectral radiant incidence produces at its specified reference plane a known level of spectral radiant incidence, $E_e(\lambda)$ ($\mu W/cm^2$ per nanometer of wavelength). By passing this radiation through an interference filter of known spectral transmittance, $\tau\lambda$ in a narrow band (<20 nm) centered at λ_o (a dimensionless function of wavelength), a narrow band of spectral radiant incidence $E_e(\lambda)\ \tau_e(\lambda)$ is obtained. This is converted to luminous incidence by integration:

$$E_v(\lambda_o) = 6.80 \int_0^{\infty} [E_e(\lambda)\tau_e(\lambda)]\ v(\lambda)d\lambda$$

Where: $E_v(\lambda_o)$ = luminous incidence (lux) at the reference plane of the standard of spectral radiant incidence, for a wavelength,

$$\lambda_o \sim \lambda_v\ (ave) = \lambda_v\ (min) + \lambda_v\ (max)$$

$[E_e(\lambda)\ \tau_e(\lambda)]$ = spectral radiant incidence ($\mu W/cm^2$) resulting from passing the flux from the standard of spectral radiant incidence $E_e(\lambda)$ through a filter of spectral transmittance $\tau_e(\lambda)$.

$V(\lambda)$ = photopic spectral luminous efficiency value as given in ANSI/IES RP-16-1980

6.80 = units conversion constant (lux per $\mu W/cm^2$) obtained from the product of 680 lumers per watt, the peak of the standard observer response, and 10,000 cm^2/m^2.

With the photometer reacceptance plane at the reference plane of the standard of spectral radiant incidence, the luminous incidence thus calculated (in lux) is applied. The response of the photometer, to this standard luminous incidence is $P_{std}(\lambda_o)$.

4.4.2.3 Operation of photometer. The indicator assembly to be measured is aligned at the angle specified, and at a known distance, d (meters) from the reacceptance plane of the photometer. Specified drive current is applied to the indicator and the luminous intensity is computed from the photometer indications, P_{LED}:

$$I_{vLED} = \frac{P_{LED}}{P_{std}(\lambda_o)} \cdot E_v(\lambda_o) \cdot d^2$$

Where: I_{vLED} = luminous intensity of the LED (candelas).

$\frac{P_{LED}}{P_{std}(\lambda_o)}$ = ratio of photometer response from LED to response from standard luminous incidence.

$E_v(\lambda_o)$ = standard luminous incidence (lux) calculated as above.

d = distance (meters) from emittance plane of LED to reacceptance plane of photometer.

NOTE: Use of the wavelength designator, λ_o, implies only that the photometer response was calibrated at that wavelength. The interference filter should not be used with the photometer in measuring; it is used only for calibration.

5. PACKAGING

5.1 Packaging requirements. The requirements for packaging shall be in accordance with MIL-S-19500.

6. NOTES

(This section contains information of a general or explanatory nature that may be helpful, but is not mandatory.)

6.1 Intended use. Indicators conforming to this drawing are intended for use when military specifications do not exist and qualified military devices that will perform the required function are not available for OEM application. This drawing is intended exclusively to prevent the proliferation of unnecessary duplicate specifications, drawings, and stock catalog listings. When a military specification exists and the product covered by this drawing has been qualified for listing on the QPL, this drawing becomes obsolete and will not be used for new design. The QPL product shall be the preferred item for all applications.

6.2 Acquisition requirements. Acquisition documents should specify the following:

a. Title, number, and date of the specification.

b. Issue of DODISS to be cited in the solicitation, and if required, the specific issue of incividual documents referenced (see 2.1).

c. Complete PIN (see 1.2).

d. Requirements for delivery of one copy of the quality conformance inspection data with each shipment of parts by the manufacturer, if applicable.

e. Whether the manufacturer performs the group A and group B tests or provides certification of compliance with group A and group B requirements.

f. Requirements for certificate of compliance, if applicable.

g. Requirements for notification of change of product to acquiring activity, if applicable.

h. Requirements for packaging and packing.

i. Lead finish (see 1.3.f(2)).

j. Body finish in accordance with 3.3.2.2.

6.3 Replaceability. Indicator assemblies covered by this drawing will replace the same commercial device covered by contractor-prepared specification or drawing.

DESC drawing PIN 85122-	Color	Similar pin 1/ CAGE number	Vendor PIN 1/ CAGE number
G01	Green	3R006	PS/LH/8G
R01	Red		PS/LH/8R
Y01	Yellow		PS/LH/8Y
G02	Green		STR/LH/8G
R02	Red		STR/LH/8R
Y02	Yellow		STR/LH/8Y
G03	Green		PS/LH/8/RAFG
R03	Red		PS/LH/8/RAFR
Y03	Yellow		PS/LH/8/RAFY
G04	Green		PS/LH/8/RAPPG
R04	Red		PS/LH/8/RAPPR
Y04	Yellow		PS/LH/8/RAPPY
G05	Green		STR/LH/8/RAFG
R05	Red		STR/LH/8/RAFR
Y05	Yellow		STR/LH/8/RAFY
G06	Green		STR/LH/8/RAPPG
R06	Red		STR/LH/8/RAPPR
Y06	Yellow		STR/LH/8/RAPPY
G07	Green		STR/LH/8/HS/RAFG
R07	Red		STR/LH/8/HS/RAFR
Y07	Yellow		STR/LH/8/HS/RAFY
G08	Green		STR/LH/8/HS/RAPPG
R08	Red		STR/LH/8/HS/RAPPR
Y08	Yellow		STR/LH/8/HS/RAPPY
G09	Green		STR/LH/8/RAF/SESG
R09	Red		STR/LH/8/RAF/SESR
Y09	Yellow		STR/LH/8/RAF/SESY
G10	Green		STR/LH/8/RAPP/SESG
R10	Red		STR/LH/8/RAPP/SESR
Y10	Yellow		STR/LH/8/RAPP/SESY
G11	Green		STR/LH/8/SESG
R11	Red		STR/LH/8/SESR
Y11	Yellow		STR/LH/8/SESY
G12	Green		PS/LH/8/RAP/FLG
R12	Red		PS/LH/8/RAP/FLR
Y12	Yellow		PS/LH/8/RAP/FLY

1/ Caution: Do not use this number for item acquisition. Items acquired to this number may not satisfy the performance requirements of this drawing.

6.4 Submission of certificate of compliance. The certificate of compliance submitted to DESC-ECT, prior to listing as an approved source of supply in 6.5, shall state that the manufacturer's product meets the requirements herein.

6.5 Approved sources of supply. Approved sources of supply are listed herein. Additional sources will be added as they become available. The vendors listed herein have agreed to this drawing and a certificate of compliance (see 3.5 herein) has been submitted to DESC-ECT. For assistance in the use of this drawing, contact DESC-ECT, 1507 Wilmington Pike, Dayton, Ohio 45444, or telephone (513) 296-5373.

DESC drawing PIN 85122-	Color	Vendor PIN for CAGE number 3R006 1/	Vendor PIN for CAGE number 07479 1/ 2/	Vendor PIN for CAGE number 10236 1/ 2/
G01	Green	0X1100G	ML1641-G01X	ML1641-G01X
R01	Red	0X1100R	ML1641-R01X	ML1641-R01X
Y01	Yellow	0X1100Y	ML1641-Y01X	ML1641-Y01X
G02	Green	0X2100G	ML1644-G11X	ML1644-G01X
R02	Red	0X2100R	ML1644-R11X	ML1644-R01X
Y02	Yellow	0X2100Y	ML1644-Y11X	ML1644-Y01X
G03	Green	0X1200G	ML1642-G01X	ML1642-G01X
R03	Red	0X1200R	ML1642-R01X	ML1642-R01X
Y03	Yellow	0X1200Y	ML1642-Y01X	ML1642-Y01X
G04	Green	0X1300G	ML1643-G11X	ML1643-G01X
R04	Red	0X1300R	ML1643-R11X	ML1643-R01X
Y04	Yellow	0X1300Y	ML1643-Y11X	ML1643-Y01X
G05	Green	0X2200G	ML1645-G01X	ML1645-G01X
R05	Red	0X2200R	ML1645-R01X	ML1645-R01X
Y05	Yellow	0X2200Y	ML1645-Y01X	ML1645-Y01X
G06	Green	0X2300G	ML1646-G11X	ML1646-G01X
R06	Red	0X2300R	ML1646-R11X	ML1646-R01X
Y06	Yellow	0X2300Y	ML1646-Y11X	ML1646-Y01X
G07	Green	0X2210G	ML1645-G01X	ML1645-G02X
R07	Red	0X2210R	ML1645-R01X	ML1645-R02X
Y07	Yellow	0X2210Y	ML1645-Y01X	ML1645-Y02X
G08	Green	0X2310G	ML1646-G11X	ML1646-G02X
R08	Red	0X2310R	ML1646-R11X	ML1646-R02X
Y08	Yellow	0X2310Y	ML1646-Y11X	ML1646-Y02X
G09	Green	0X2211G	ML1645-G11X	ML1645-G12X
R09	Red	0X2211R	ML1645-R11X	ML1645-R12X
Y09	Yellow	0X2211Y	ML1645-Y11X	ML1645-Y12X
G10	Green	0X2311G	ML1646-G11X	ML1646-G12X
R10	Red	0X2311R	ML1646-R11X	ML1646-R12X
Y10	Yellow	0X2311Y	ML1646-Y11X	ML1646-Y12X
G11	Green	0X2101G	ML1644-G11X	ML1644-G11X
R11	Red	0X2101R	ML1644-R11X	ML1644-R11X
Y11	Yellow	0X2101Y	ML1644-Y11X	ML1644-Y11X
G12	Green	0X1250G	ML1642-G11X	ML1642-G01X
R12	Red	0X1250R	ML1642-R11X	ML1642-R01X
Y12	Yellow	0X1250Y	ML1642-Y11X	ML1642-Y01X

1/ Caution: This PIN is for information only, do not use this number for acquisition or marking.
2/ Last digit in PIN indicates type of terminations: For 07479 and 10236: 1 = Pin terminals, 2 = Solder loops, and 3 = Flying leads.

Vendor CAGE number	Vendor name and address
07479	Minelco, Incorporated 135 South Main Street Thomaston, CT 06787-0459
10236	Electrodynamics, Inc. 1200 Hicks Road Rolling Meadows, Illinois 60008
3R006	Oxley, Incorporated 25 Business Park Drive Branford, CT 06405